

DECL. OF THOMAS GAFFORD IN
SUPPORT OF KELORA'S MSJ OPPOSITION

Kelora Systems, LLC,

Plaintiff and Counterclaim-Defendant,

v.

Target Corporation; OfficeMax
Incorporated; Rockler Companies, Inc.; 1-
800-Flowers.com, Inc.; Amazon.com, Inc.;
Dell, Inc.; Office Depot, Inc.; Newegg Inc.;
Costco Wholesale Corporation; Hewlett-
Packard Company; CircuitCity.com Inc.;
Audible, Inc.; and Zappos.com, Inc.,

*Defendants and Counterclaim-
Plaintiffs.*

OfficeMax Incorporated,

Third-Party Plaintiff,

v.

Adobe Systems Incorporated,

Third-Party Defendant.

No. 4:11-cv-1548-CW (filed Nov. 8, 2010)
(related case)

Nebraska Furniture Mart, Inc.,

Plaintiff and Counterclaim-Defendant,

v.

Kelora Systems, LLC,

Defendant and Counterclaim-Plaintiff.

No. 4:11-cv-2284-CW (filed Feb. 3, 2011)
(related case)

1. INTRODUCTION

1. My name is Thomas A. Gafford. I am an electrical engineer and the owner of Gafford Technology, a firm that specializes in computer and electronics engineering, consulting, and design. The following is a brief review of my experience and qualifications. I graduated with a Bachelor of Science in Electrical Engineering from the University of Washington, Seattle, in 1972. I also attended the Master of Science in Electrical Engineering program at Stanford University, Palo Alto, California from 1972 to 1973, and I continued to work at Stanford in the Artificial Intelligence Laboratory until 1976. Prior to college, I served in the U.S. Air Force,

1 where I had extensive experience with analog and digital signaling, control, and communications
2 systems as a member of the maintenance team for the S.A.G.E. air defense computer system at
3 McChord Air Force Base, Tacoma, Washington. I also attended the U.S. Air Force S.A.G.E.1
4 Computer Training Course in 1967 at Keesler Technical Training Center in Biloxi, Mississippi.

5 2. I have over 40 years of experience in areas relating to complex systems, including
6 digital circuit design, digital control systems, computer software and computer design. My
7 experience with computers and digital systems began when I was in the Air Force, with the
8 S.A.G.E. system, and continued throughout my employment at Stanford and at a Silicon Valley
9 start-up company that I founded. Additional details regarding my qualifications are described in
10 my Curriculum Vitae, a true and correct copy of which is attached hereto as Exhibit 1. Attached
11 as Exhibit 2 is a list of cases in which I have testified as an expert witness at deposition or trial
12 over the last four years.

13 **2. SCOPE OF ASSIGNMENT**

14 3. I have been retained by Kelora Systems, LLC, as an expert in connection with the
15 above-captioned matter. For my work as an expert in this case, I am being paid an hourly fee of
16 \$550/hour plus out-of pocket expenses. I am being paid regardless of the facts I know or discover
17 and/or the conclusions or opinions I reach. I have no personal interest or financial stake in the
18 outcome of the present litigation.

19 4. I have been informed and understand that the Defendants in this action have
20 asserted that claims 1–4 and 9 of Kelora’s U.S. Patent No. 6,275,821 (“’821 patent”) patent are
21 invalid and not infringed. In particular, the Defendants asserted such defenses in Defendants’
22 Claim Construction Brief and Motion for Summary Judgment of Invalidity and Non-infringement
23 (“Motion”), dated September 15, 2011. I have reviewed the Motion and the evidence cited
24 therein. I submit this declaration in support of Kelora’s Opposition to the Motion.

25 5. I have considered and relied upon the material cited in this report and in the index
26 attached as Exhibit 3.

27 6. I understand that the parties have reached agreed constructions on certain claim
28 terms, and that others are disputed. *See* Patent L.R. 4-2 Joint Claim Construction and Prehearing

Statement, Motion, Exhibit 1. In my analysis, I have applied the agreed constructions, and, for disputed terms, I have used Kelora's constructions and, in the alternative, the Defendants' constructions. Where no construction has been ordered by a court or proposed by the parties, I have used the ordinary meaning of the terms to one skilled in the art. I have not reached any conclusions as to the correctness of any claim constructions regarding the terms in dispute from the asserted patents, nor have I attempted to do so. I reserve the right to analyze the claims further and to supplement my report once the Court issues an order construing the claim language.

3. APPLICABLE LEGAL PRINCIPLES

7. I have been informed and understand that the following legal principles apply to my analysis of issues relating to patent infringement and validity.

3.1. Claim Construction

8. The construction of patent claims is a matter of law for the Court. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996). "It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005). As noted above, I have not formed any opinions concerning the proper construction of the patent claims.

3.2. Infringement

9. A two-step analysis is employed in making an infringement determination. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995). First, the court must construe the asserted claims to ascertain their meaning and scope. *See id.* Then, the properly construed claims are compared with the accused infringing product. *See Markman*, 52 F.3d at 976.

10. "Infringement is assessed by comparing the accused device to the claims; the accused device infringes if it incorporates every limitation of a claim, either literally or under the doctrine of equivalents." *MicroStrategy Inc. v. Business Objects, S.A.*, 429 F.3d 1344, 1352 (Fed. Cir. 2005). "Direct infringement requires a party to perform each and every step or element of a

1 claimed method or product.” *BMC Res., Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1378 (Fed. Cir.
2 2007).

3 11. The patent owner has the burden of proving infringement and must meet its burden
4 by a preponderance of the evidence. *SmithKline Diagnostics, Inc. v. Helena Lab. Corp.*, 859 F.2d
5 878, 889 (Fed. Cir. 1988).

6 3.3. Validity

7 12. A patent is presumed valid, each claim of a patent is presumed valid independently
8 of the validity of other claims, and to overcome the presumption that patents are valid, clear and
9 convincing evidence is required. 35 U.S.C. § 282; *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S. Ct.
10 2238, 2242 (U.S. 2011); *Dayco Prods., Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 1370-71
11 (Fed. Cir. 2003); *Oakley, Inc. v. Sunglass Hut Int'l*, 316 F.3d 1331, 1339 (Fed. Cir. 2003).

12 13. Obviousness is a question of law, which depends on several underlying factual
13 inquiries. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007).

14 Under § 103, the scope and content of the prior art are to be determined;
15 differences between the prior art and the claims at issue are to be ascertained; and
16 the level of ordinary skill in the pertinent art resolved. Against this background the
17 obviousness or nonobviousness of the subject matter is determined. Such
18 secondary considerations as commercial success, long felt but unsolved needs,
19 failure of others, etc., might be utilized to give light to the circumstances
20 surrounding the origin of the subject matter sought to be patented.

21 *KSR*, 550 U.S. 406, quoting *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

22 14. The Supreme Court explained in *KSR*, “[A] patent composed of several elements is
23 not proved obvious merely by demonstrating that each of its elements was, independently, known
24 in the prior art.” *KSR*, 550 U.S. at 418. Likewise, a defendant asserting obviousness in view of a
25 combination of references has the burden to show “a reason that would have prompted a person
26 of ordinary skill in the relevant field to combine the elements in the way the claimed new
27 invention does.” *Id.*

28 15. The Supreme Court has emphasized the need to value “common sense” over “rigid
preventative rules” in determining whether a motivation to combine existed. *Id.* at 419-20.

1 “[A]ny need or problem known in the field of endeavor at the time of invention and addressed by
 2 the patent can provide a reason for combining the elements in the manner claimed.” *Id.* at 420.
 3 However, the prior art “must be considered in its entirety, i.e., as a whole, including portions that
 4 would lead away from the invention in suit[.]” *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d
 5 1561, 1568 (Fed. Cir. 1987).

6 16. “[W]hen a patent ‘simply arranges old elements with each performing the same
 7 function it had been known to perform’ and yields no more than one would expect from such an
 8 arrangement, the combination is obvious.” *KSR*, at 1740, quoting *Sakraida v. Ag Pro, Inc.*, 425
 9 U.S. 273, 282 (1976). “The opposite conclusion would follow, however, if the prior art indicated
 10 that the invention would not have worked for its intended purpose or otherwise taught away from
 11 the invention.” *Depuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1326 (Fed.
 12 Cir. 2009).

13 3.4. Prior Art

14 17. “[T]he on-sale bar applies when two conditions are satisfied before the critical
 15 date. First, the product must be the subject of a commercial offer for sale.” *Pfaff v. Wells*
 16 *Electronics*, 525 U.S. 55, 67 (1998). “Second, the invention must be ready for patenting. That
 17 condition may be satisfied in at least two ways: by proof of reduction to practice before the
 18 critical date; or by proof that prior to the critical date the inventor had prepared drawings or other
 19 descriptions of the invention that were sufficiently specific to enable a person skilled in the art to
 20 practice the invention.” *Pfaff* at 68.

21 18. “It is well settled that prior art under 35 U.S.C. § 102 (b) must sufficiently describe
 22 the claimed invention to have placed the public in possession of it. Such possession is effected if
 23 one of ordinary skill in the art could have combined the publication’s description of the invention
 24 with his own knowledge to make the claimed invention. Accordingly, even if the claimed
 25 invention is disclosed in a printed publication, that disclosure will not suffice as prior art if it was
 26 not enabling.” *In re Donohue*, 766 F.2d 531, 534 (Fed. Cir. 1985) (internal citations omitted). To
 27 establish an on-sale bar, it must be shown that the device sold “fully anticipated the claimed
 28

invention or would have rendered the claimed invention obvious by its addition to the prior art.”
Allen Engineering Corp. v. Bartell Industries, 299 F. 3d 1336 (Fed. Cir. 2002).

4. OBVIOUSNESS

4.1. The Scope And Content Of The Prior Art

4.1.1. The Teachings Of *Arnett* Are Incomplete And Contradictory And Thus Do Not Render Any Aspect Of The Reexamined Claims Obvious To One Of Ordinary Skill In The Art

19. I have reviewed the correspondence from Nick Arnett cited in the Defendants’ Motion and attached as Exhibit A (“*Arnett*”) to the Declaration of Nick Arnett.

20. Based on my review, and as explained more fully below, *Arnett* does not sufficiently describe any portion of the claimed invention to have placed the public in possession of it. The Defendants argue that *Arnett* shows “resubmission as a preferred solution to the iterative searching in a stateless World Wide Web system.” Motion, pp. 23-24. However, this argument is off the mark, as the reexamined claims of the ‘821 patent do not make any reference to “state” or “statelessness.”

21. *Arnett* shows that to one of ordinary skill in the art at the time of the invention of the ‘821 Patent, there was no general agreement on whether, where, and how to store and retrieve state when using the HTTP protocol. In *Arnett*, the author argued for contradictory approaches, and different developers also advocated for different approaches. Further, the discussions of these different approaches are at a high level of abstraction, leaving unaddressed both the details of implementation and important fundamentals such as when any information would be stored, where it would be stored, under what circumstances it would be stored, and under what circumstances it would be accessed.

22. *Arnett* advocates for many courses of action, speculates on the possible effectiveness of each, and is at best ambiguous as to what is taught. In *Arnett*, the author first teaches passing back “to the server a set of parameters that describes the previous search results, to which new narrowing or widening parameters can be added.” Declaration of Arnett, Exhibit A, ¶5. However, the author immediately argues against using this approach, stating, “I can

1 imagine that eventually the results might become quite complex, using up a lot of bandwidth to
 2 pass,” which suggests that the author does not know whether the approach would succeed or fail.
 3 Declaration of Arnett, Exhibit A, ¶8. In *Arnett*, Jared Rhine is quoted as advocating the use of a
 4 stateful protocol in situations where previous search results need to be kept. In disagreement with
 5 Rhine, the author opines, “I’d much rather predict that performance will improve than to bet that
 6 we can guess what kind of statefulness should be built into the server.” Declaration of Arnett,
 7 Exhibit A, ¶6, 8. Accordingly, *Arnett* itself highlights the possibility of two opposing courses of
 8 action for solving a problem of keeping previous search results. Regardless, as noted above, the
 9 reexamined claims of the ‘821 patent do not make any reference to “state” or “statelessness” and
 10 so discussion of these concepts in *Arnett* is of little relevance.

11 23. Nothing in *Arnett*, as further supported by the Deposition of Nick Arnett, taken on
 12 September 26, 2011, indicates that the author’s comments are relevant to guided parametric
 13 search. Mr. Arnett’s own endeavors are not directed to servers or to searching but, rather, to a
 14 method for keeping track of expansions of subheadings in an outline interface in a stateless
 15 environment (“I’m working on an application . . .”), and not for performing guided parametric
 16 searching. Declaration of Arnett, Exhibit A, ¶2. Defendants have not shown that a person
 17 interested in guided parametric search would have looked to the teachings in *Arnett*. Mr. Arnett
 18 clarifies in his deposition that his statements regarding his project are directed to preserving the
 19 visual appearance of the client when navigating a hierarchy or tree, and not to guided parametric
 20 searching. Deposition of Arnett, 31:23-32-11. However, when *Arnett* discusses “passing
 21 parameters, which are kept by the *browser* and re-sent” (emphasis original), it is entirely
 22 unclear which “parameters” he refers to. *Arnett* mentions two kinds of parameters: parameters for
 23 whether a previously expanded subheading remains expanded when a user selects a new
 24 subheading to expand in a hierarchical outline, or “parameters that describe the previous search
 25 results” or “a description of [a query]. . .” Arnett Declaration, Exhibit A, ¶5, 7. *Arnett* does not
 26 disclose what these terms mean nor how such parameters are formed, and accordingly is not
 27 enabling. Further, neither of such parameters are the “selection criteria” as claimed in claims 1
 28 and 9 of the reexamined ‘821 Patent.

24. In addition to not enabling any part of guided parametric searching, *Arnett* does not enable one of ordinary skill in the art to implement Mr. Arnett's own endeavor with respect to browsing outline interfaces in a stateless environment. For example, there is no indication in *Arnett* of where the "parameter" information would be stored, how it is "kept by the *browser*," or how the browser would know to retrieve it, and how it is "re-sent." The Defendants have provided no evidence that such details are within the knowledge of a person of ordinary skill in the art before October 14, 1994. Accordingly, *Arnett* does not describe any portion of the claimed invention with sufficient enabling details to have placed the public in possession of it.

4.1.2. The Claimed Inventions Of The Reexamined Claims Of The '821 Patent Were Not Ready for Patenting When the AMP Navigator Demonstration Program Was Allegedly Offered For Sale

25. I have been advised that the AMP Navigator demonstration program is not prior art under 35 U.S.C. § 102 (b) with respect to the reexamined claims if the inventions claimed in the reexamined claims of the '821 Patent were not ready for patenting until after the critical date of October 14, 1993. The evidence I have reviewed indicates that the subject matter of the reexamined claims was not conceived before the critical date. Exhibit 11 to Motion, Danish Deposition of 1/20/09, at p. 375; Exhibit 15 to Motion, Kelora's Responses to eBay's First Set of Interrogatories (Response to Interrogatory 1 states "Claims 1, 2, 3, 4 and 9 of the '821 patent were conceived of during or before the second quarter of 1994.").

26. I have reviewed the source code for the AMP Navigator demonstration program cited in the Defendants' Motion and attached as Exhibits Q and R to the Declaration of Theodore Chandler. I also have read the Declaration of Kris Kimbrough in which he describes certain features of that source code, as well as the exhibit thereto including the source code.

27. Before the critical date of October 14, 1993, the inventors had prepared the AMP Proposal attached as Exhibit S of Declaration of Chandler, and the AMP Navigator demonstration program.

28. The reexamined claims of the '821 patent specify "a server connected to a client computer through a computer network" (claim 1) and "a server connected to a computer network"

(claim 9), and further specify steps that must be “performed with a server,” including without limitation step (h), in which the server must perform “accepting a second selection criteria ... [comprising] a resubmission.” The inventors learned about web servers some time in the second quarter of 1994, after the critical date of October 13, 1993. Deposition of Sherif Danish, Motion, Exhibit 11, p. 375. Accordingly, the inventions claimed in the reexamined claims of the ‘821 Patent could not have been reduced to practice before the critical date. Indeed, although Kelora asserts an earlier date of conception, the Defendants argue at footnote 6 on pp. 19-20 of the Motion that the inventions of the reexamined claims are not entitled to a priority date before the October 14, 1994 filing date.

29. The inventors did not know of web servers at the time the AMP Navigator demonstration program was developed and, therefore, the AMP Navigator demonstration program could not have taught the use of a web server. Deposition of Sherif Danish, Motion, Exhibit 11, p. 375.

30. Based on my own independent analysis of the source code and Mr. Kimbrough’s declaration, I conclude that the AMP Navigator demonstration program does not constitute a reduction to practice of the claimed methods of reexamined claim 1 or claim 9, or any description sufficiently specific to enable a person of ordinary skill in the art to practice the claimed methods of reexamined claim 1 or claim 9.

31. To one of ordinary skill in the art, the source code for the AMP Navigator demonstration program shows the database accepting one and only one search term at a time, corresponding to one and only one alternative or feature, and returning one set of search results based on the search. As the source code for the AMP Navigator demonstration program shows, the database is not capable of processing more than one search term at a time for searching, and therefore no search of more than one term is performed as required in step (h) of claims 1 and 9 of the ‘821 Patent, which recite accepting at minimum two terms, one of which was submitted previously.

32. Instead of accepting a resubmission of a previously submitted search term, the AMP Navigator demonstration program teaches away from resubmission by keeping the search

1 results from a search on a first search term, then intersecting the results with the search results
 2 from another search term. As Mr. Kimbrough explains in his declaration, the AMP Navigator
 3 demonstration program does not perform any client-server interaction and does not have any
 4 server functionality. Kimbrough Decl., ¶ 14. Further, Mr. Kimbrough explains in his declaration
 5 that the design of the AMP Navigator demonstration program was not capable of the
 6 “resubmission” functionality specified in the reexamined claims. Kimbrough Decl., ¶¶ 15-26.

7 33. For at least these reasons, one of ordinary skill in the art as of October 14, 1994,
 8 would understand that the source code for the AMP Navigator demonstration program shows that
 9 it did not include any client-server functionality and did not perform step (h) of reexamined claim
 10 1, or step (h) of reexamined claim 9. If the Court construes step (g) of both reexamined claims 1
 11 and 9 (“revising said feature screen” and “revising said data for said feature screen,” respectively)
 12 to mean that the server sends the first selection criteria to the client, this step is not found in AMP
 13 Navigator demonstration program. To one of ordinary skill in the art as of October 14, 1994, the
 14 reexamined claims are not anticipated by or obvious in view of the AMP Navigator
 15 demonstration program; thus, the AMP Navigator demonstration program is not prior art with
 16 respect to the reexamined claims. *Allen*, 299 F. 3d 1336.

17 4.1.3. Content Of The Prior Art; Differences Between The Prior Art And The 18 Claims

19 4.1.3.1. Teachings of AMP Navigator Demonstration Program to One of 20 Ordinary Skill in the Art

21 34. Even if the AMP Navigator demonstration program is considered to be prior art
 22 under Section 102(b) with respect to the reexamined claims, notwithstanding the fact that the
 23 reexamined claims were not conceived until after the critical date, the AMP Navigator
 24 demonstration program did not disclose to one of ordinary skill in the art as of October 14, 1994
 25 numerous limitations of the reexamined claims. As explained in the preceding section, the source
 26 code for the AMP Navigator demonstration program shows that it did not perform all of the steps
 27 of the reexamined claims of the ‘821 Patent. As indicated in Mr. Kimbrough’s declaration, when
 28 the source code for the AMP Navigator demonstration program is run and used, it is not capable

1 of performing those functions. Screen shots of the user interface taken while the AMP Navigator
2 demonstration program is running do not show whether or how search is being performed. In
3 fact, the source code for the AMP Navigator demonstration program would not have enabled a
4 person of ordinary skill in the art as of October 14, 1994, to practice the inventions claimed in
5 claim 1 and claim 9 of the reexamined '821 Patent.

6 35. Even if the AMP Navigator demonstration program is considered as prior art, a
7 person of ordinary skill in the art as of October 14, 1994, would understand that it fails to show
8 each and every element of claim 1 and claim 9 of the reexamined '821 patent, and the other
9 references cited in the Motion fail to supply the differences between the claims of the reexamined
10 '821 patent and the AMP Navigator demonstration program.

11 36. Step (h) of claim 1 of the reexamined '821 patent recites "accepting a second
12 selection criteria from said client computer via said computer network at said server wherein the
13 second selection criteria comprises a resubmission to the server of the alternative or alternatives
14 of the first selection criteria plus at least one alternative selected from the revised feature screen."

15 37. Step (h) of claim 9 of the reexamined '821 patent recites "receiving and accepting
16 a second selection criteria from said client computer via said computer network, in which said
17 second selection criteria comprises (1) a resubmission by said client computer of the alternative
18 or alternatives of the first selection criteria along with (2) at least one alternative selected from the
19 revised feature screen."

20 38. The specification states that in an Internet embodiment, "All of the program files
21 and data files described in the local embodiment reside on the server 125." '821 Patent, 18:13-14.
22 Per Kelora's construction of the preambles of claim 1 and claim 9 of the reexamined '821 patent,
23 both claims require an operating environment of a web server and a client browser. The AMP
24 Navigator demonstration program does not show such web server or such client browser.
25 Further, even under the Defendants' proposed construction of the preambles of reexamined
26 claims 1 and 9, the source code for the AMP Navigator demonstration program does not include
27 any reference to a client or a server and the AMP Navigator demonstration program was a single
28 computer demonstration that had no client or server. Further, one of ordinary skill in the art as of

October 14, 1994, would understand that step (h) of claim 1 and step (h) of claim 9 of the reexamined '821 patent are not met in the AMP Navigator demonstration program because the combination of "the alternative or alternatives of the first selection criteria" and "at least one alternative selected from the revised feature screen" are never submitted for search in the database of the AMP Navigator demonstration program.

39. Thus, one of ordinary skill in the art as of October 14, 1994, would understand that the AMP Navigator demonstration program does not perform either of step (h) in reexamined claim 1 or step (h) in reexamined claim 9 because (1) no more than one alternative is submitted to the database for searching at a time, and (2) it does not allow previously searched terms to be submitted again for searching in the database, and therefore does not show "resubmission," as required by the reexamined claims.

4.1.3.2. Teachings of AMP Navigator in view of Suzuki in view of Arnett in view of the HTTP protocol to One of Ordinary Skill in the Art

40. Defendants rely on *Arnett*, *Suzuki*, *Berners-Lee* and various other references regarding the HTTP protocol to supply the differences between the AMP Navigator demonstration program and the reexamined claims. I note that, as indicated on the face of the Reexamination Certificate for the '821 Patent, *Suzuki* (JP S64-1030) and *Berners-Lee*, *HyperText Transfer Protocol* were cited during the reexamination and the reexamined claims were issued over these references. However, the reexamination Examiner relied instead on the Granacki reference and indicated in the Final Rejection dated June 18, 2009, that rejections based on the other references would be "redundant and unnecessary." Appendix re '821 Patent Reexamination at KS689. Having reviewed the references cited during the reexamination and the references relied upon in the Defendants' Motion, it is my opinion that the references relied upon in the Defendants' Motion teach a person of ordinary skill in the art as of October 14, 1994, no more than the references cited in the reexamination over which the reexamined claims were allowed. As explained more fully below, no combination of the references cited in the Defendants' Motion with the AMP Navigator demonstration program teaches a person of ordinary skill in the

1 art as of October 14, 1994, each and every element of claims 1-4 and 9 in the reexamined '821
2 Patent.

3 41. Defendants argue that *Suzuki* teaches that a database on a local computer could be
4 adapted to operate in a client-server arrangement. However, *Suzuki* does not teach anything about
5 a client-server architecture: it does not use the terms "client" or "server" and does not teach
6 anything about the communication between a client and a server. *Suzuki* is concerned with
7 identifying files that are associated with specified keywords. It works by filtering. First, a user
8 searches for a first keyword. The system finds all the matching files, identifies other keywords
9 associated with those files, and presents the user with a list of those keywords. If the user selects
10 a keyword from this list, the system performs a second search and presents the user with a second
11 updated list of keywords associated with those files that match both of the previously selected
12 keywords. The *Suzuki* reference focuses exclusively on the appearance of the user's screen,
13 discloses no client-server architecture other than the possibility of a remote database, and
14 discloses nothing of the underlying communication between a user and a remote database. *Suzuki*
15 also does not show resubmission or resubmission to a server. It does not address where the logic
16 for the search process is located: all of the logic may be on the host computer or all of the logic
17 may be on the terminal computer, in neither case is a client-server architecture disclosed, in which
18 the logic is partitioned between a computer designated as a client and a computer designated as a
19 server, and a communication method described for them to work together. As the mechanism by
20 which additional search terms are delivered to the search engine is not specified, nothing in the
21 *Suzuki* reference discloses what, if anything, is done with prior queries. For example, prior search
22 terms could have been stored in *Suzuki*'s database device instead of being resubmitted, and
23 *Suzuki*'s database could also have maintained the results of a first search and augmented them
24 upon receipt of additional keywords, without the original keywords being resubmitted.. *Suzuki* is
25 silent on this matter.. "[W]ithout reinputting" on page 9 of *Suzuki* is not proof that the original
26 search string is resubmitted; it only address the convenience for the user to not re-type a query
27 term.

28

42. As Defendants point out, *Suzuki* further explains: “In the information above, the symbol ‘ \cap ’ is one symbol used for a logical operation and is a mark which means ‘AND’ (the logical multiplication operation).” Motion at 33 (quoting *Suzuki*, Leventhal Decl. Ex. 2. at 3). From this, Defendants conclude that “the search expression “COMPUTER \cap ARTIFICIAL INTELLIGENCE” is a resubmission of the original term “COMPUTER” along with the user’s subsequent narrowing term “ARTIFICIAL INTELLIGENCE.”” Motion at 23. This is not correct. The quoted excerpt does *not* describe resubmission. It does not even describe concatenation. It states that “search processing is performed using a logical expression ... in which search keywords ... are added to the previously inputted search keyword...” It is not stated that this “logical expression” is a search criteria which is accepted by a server. *Suzuki* teaches only that at some point in the data flow of *Suzuki* (it is silent as to when), the results of searching in the database on separate keywords are intersected, as is done in the AMP Navigator demonstration program. This portion of *Suzuki* says nothing about where, in a second query, the various keywords are sourced from or even if there is an *actual* second query that contains both previously selected keywords and newly selected keywords. It is silent as to any resubmission.

43. Because *Suzuki* teaches nothing that is not already implemented in the AMP Navigator demonstration program other than, possibly, a remote database, there is no reason that a person of ordinary skill in the art as of October 14, 1994, would have had a reason to combine *Suzuki* and the AMP Navigator demonstration program. Moreover, no one of skill in the art as of October 14, 1994, would have reasonably expected to succeed in combining any teachings of *Suzuki* with the AMP Navigator demonstration program to result in the claimed invention. One would have taken from *Suzuki* that a remote database could be coupled with the search paradigm of *Suzuki*, which is similar to but less rich than the search paradigm of the AMP Navigator demonstration program (essentially, *Suzuki* has only one type of item (files) and one category of alternatives (keywords), whereas the AMP Navigator demonstration program deals with any type of item and for each type of item it can have multiple categories of alternatives (e.g., size, color, style, and brand). Therefore, combining *Suzuki* with the AMP Navigator demonstration program would have been expected by a person of ordinary skill in the art as of October 14, 1994, to have

1 resulted, and would have resulted, in a system with the logical model of the AMP Navigator
2 demonstration program, as described above, coupled with a remote database.

3 44. Thus, the AMP Navigator demonstration program and *Suzuki*, even when
4 combined, fail to teach a person of ordinary skill in the art as of October 14, 1994, the
5 “accepting” of step (h) of reexamined claim 1 and of step (h) of reexamined claim 9 as performed
6 in the operating environment of a web server and client browser. As previously discussed, the
7 AMP Navigator demonstration program includes code to prevent acceptance of a resubmission
8 and thus teaches away from the claimed inventions.

9 45. Defendants add references relating to a stateless HTTP server, such as those by
10 *Berners-Lee*, to show a web server and client/browser architecture, which are absent in a
11 combination of the AMP Navigator demonstration program and *Suzuki*. The *Berners-Lee*
12 references discuss the World Wide Web generally and statelessness in the context of the HTTP
13 protocol. However, the *Berners-Lee* references do not teach a server “accepting” a
14 “resubmission,” as required in step (h) of claim 1 and step (h) claim 9 of the reexamined ‘821
15 patent, to a person of ordinary skill in the art as of October 14, 1994.

16 46. Defendants rely on Jason Ng’s references to teach web access to a database, and
17 the PC Magazine reference to teach the advantages of a client-server arrangement. However, *Ng*
18 and *PC Magazine* are cumulative of references already cited, and neither *Ng* nor *PC Magazine*
19 teach a server “accepting” a “resubmission” as required in step (h) of claim 1 and step (h) claim 9
20 of the reexamined ‘821 patent to a person of ordinary skill in the art as of October 14, 1994.

21 47. Defendants cite to MORE (Leventhal Ex. 13) for demonstrating “both that those of
22 ordinary skill in the art were motivated to adapt existing database systems to work on the World
23 Wide Web and that such adaptation was well within the skill level at the time.” Motion, p. 27.
24 Motivation to adapt applications, in general, to the web, is not contested. However, motivation to
25 adapt the AMP Navigator demonstration program, which is Defendants’ primary reference and
26 which is significantly different from the claimed methods, is not taught by MORE. Moreover,
27 that the MORE developers, whose skill-level is not indicated but who appear to be researchers
28 affiliated with a university and sponsored by NASA, were able to redesign a specific application

1 says nothing about whether one of ordinary skill in the art would have been able to and motivated
2 to redesign the AMP Navigator demonstration program. It is my opinion one of ordinary skill
3 would not have been so motivated or so able. For example, nothing in MORE details at the
4 source code level the starting point for their redesign and whether or not it resembled the AMP
5 Navigator demonstration program, nothing in MORE details the resources available to them, and
6 nothing in MORE states that the end results corresponded to the reexamined claims of the '821
7 Patent (*e.g.*, MORE does not teach accepting a resubmission). Indeed, MORE describes the effort
8 as a "complete redesign" (Leventhal Ex. 13, p. 283), notes that the end-result does not use
9 standard HTML (it uses what they refer to as "HTML+," Leventhal Ex. 13, p. 284), and presumes
10 that the web server implements certain extensions (Leventhal Ex. 13, p. 284). MORE describes a
11 starting point that is architecturally very different from that of the AMP Navigator demonstration
12 program (see Leventhal Ex. 13, p. 286) in that the starting point in MORE was already somewhat
13 factored. Although the feasibility of doing **something** on the web was quickly established by the
14 MORE team (Leventhal Ex. 13, p. 286), this only led to the conclusion that extensive architecture
15 and design changes were necessary and solutions for new problems had to be identified
16 (Leventhal Ex. 13, p. 287). Again, MORE might remind one of ordinary skill in the art as of
17 October 14, 1994, that rewriting the AMP Navigator demonstration program to be a web
18 application was possible, but it would not teach them how to do it in any particular way and it
19 would not produce the result in the reexamined claims of the '821 Patent with any greater
20 likelihood than many other possible redesigns.

21 48. Further, the Defendants have not provided any explanation as to why a person of
22 ordinary skill in the art as of October 14, 1994, would have had a reason to modify the AMP
23 Navigator demonstration program or Suzuki to use a stateless HTTP server as described in the
24 Berners-Lee references in a way that would result in the claimed inventions of claims 1 and 9 of
25 the reexamined '821 patent. For the reasons discussed above, including the fact that the AMP
26 Navigator demonstration program was a local embodiment that included code that prevented
27 acceptance of a resubmission by a server, only with hindsight would such a combination have
28 been attempted by a person of ordinary skill in the art. Moreover, it remains that the combination

1 would not have resulted in the claims of the reexamined '821 patent for at least the following
2 reasons.

3 49. Assuming that a motivation existed to modify the AMP Navigator demonstration
4 program, the simplest way to convert the AMP Navigator demonstration program to client-server
5 in 1994 would have been to replace the procedure call to obtain records from the local database at
6 page 9, lines 42-43 of Exhibit A to the Kimbrough declaration with a 'remote' procedure call that
7 allows the database storage and the program that searches it to reside on another computer
8 connected via a network to the computer running the demonstration program. Such an
9 implementation, while simple, would not make any use of web architecture, and would not
10 resubmit any alternative to the server.

11 50. Assuming that one of ordinary skill in the art as of October 14, 1994, might be
12 motivated to convert the AMP Navigator demonstration program into a system based on the
13 HTTP protocol and HTML, so that the demo used web clients and servers that were standardized,
14 there was no agreed upon method for performing such a conversion. One reason for this is that,
15 when designing a program that resides entirely on one computer, there are no limitations on the
16 manner in which user choices may be rendered on the screen, nor the manner in which the user's
17 selection of those choices may be communicated to a program that analyzes those choices and
18 responds to the user. However, in a web environment, all communication between the client
19 browser and the server logic must take place in accordance with the HTTP and HTML
20 specifications, and those specifications in 1994 were very limited compared to the full power of a
21 general purpose computer language like C. How to redesign the intricate logic of the AMP
22 Navigator demonstration program to operate in this more constrained environment would not
23 have been obvious to one of ordinary skill in the art in October 1994. The potential complexity of
24 this task is alluded to in MORE (see above), which describes the effort of people of above-
25 ordinary skill who had what appears to have been a more amenable starting point for their
26 redesign.

27 51. As a result of the above noted limitations, redesigning a standalone program to
28 fully take account of the benefits of a client-server or internet architecture required significant

1 reconceptualization, not mere reconfiguration. Basically the problem must be re-solved and re-
 2 implemented in a new paradigm. There is nothing inherent in the new paradigm, HTTP/HTML,
 3 nor in any of the art cited by Defendants, that would lead one of ordinary skill in the art as of
 4 October 14, 1994, to arrive at the solution claimed in the reexamined claims of the '821
 5 disclosure, starting from the AMP demonstration program.

6 52. Even if Arnett is considered as prior art, adding *Arnett* in combination does not
 7 remedy the shortcomings of the combination of references as discussed above. In *Arnett*, the
 8 author writes, "I see the need for improvement of the browsers' ability to keep track of queries
 9 and such, based on interaction, rather than a need to change the servers' capabilities in that area."
 10 Arnett's sentiment is echoed in his recent deposition:

11 Katz: So the server just wasn't part of your solution?

12 Arnett: No. I was using someone else's server.

13 Arnett Deposition, 81:23-25.

14 53. Following this teaching from Arnett to not modify the server, one of ordinary skill
 15 in the art as of October 14, 1994, would simply create a browser that had all of the functionality
 16 of the AMP Navigator demonstration program in combination with *Suzuki* and thus Arnett is
 17 teaching no "resubmission" to a server.

18 54. Even if *Arnett* is considered as prior art, and is combined with AMP Navigator
 19 demonstration program, *Suzuki*, and a stateless HTTP server, the combination fails to teach a
 20 person of ordinary skill in the art every element of claim 1 and 9 because the "accepting" of step
 21 (h) of reexamined claim 1 and step (h) of reexamined claim 9 of the reexamined patent are not
 22 taught by the combination. This is confirmed as previously discussed in Paragraph 24.

23 55. If the Court construes step (g) of both reexamined claims 1 and 9 ("revising said
 24 feature screen" and "revising said data for said feature screen," respectively) to mean that the
 25 server sends the first selection criteria to the client, this step is not found in any of the references
 26 cited by the Defendants.

27 56. Based on the above analysis, I conclude that no combination of AMP Navigator
 28 demonstration program, *Suzuki*, the HTTP protocol, and *Arnett* teach a person of ordinary skill in

the art as of October 14, 1994, all the elements of the '821 Patent because no reference teaches either step (g) and step (h) for either claim 1 or claim 9 of the reexamined '821 patent.

4.1.3.3. Teachings of HIBROWSE references – Pollitt, Ellis, and Pollitt 1994 to One of Ordinary Skill in the Art

57. The Defendants' characterization of the HIBROWSE program as described in the publications of Pollitt, Ellis, and Pollitt 1994 as "hypertext-based" is misleading because to the extent that "hypertext" was used in a HyperCard program, such hypertext bears only a tenuous relationship to the HTML specification or the HTTP protocol. "Hypertext" as used in the context of the HyperCard development environment relates to the general meaning of linking one HyperCard "card" to another "card," where all such "cards" reside on a single local machine.

58. The HIBROWSE documentation does not establish anything about what logic is present in the client and what is present in the server or the manner in which they communicate. Thus, it does not teach a person of ordinary skill in the art as of October 14, 1994, what the server accepts for a second selection criteria, and therefore does not establish that it teaches step (h) of claim 1 or step (h) of claim 9 of the reexamined '821 patent.

59. The HIBROWSE program does not employ any web server, and does not communicate via the HTTP protocol. Accordingly, I conclude that the HIBROWSE program provides no evidence of any motivation to a person of ordinary skill in the art as of October 14, 1994, to modify the AMP Navigator demonstration program to be deployed in a web environment.

4.1.4. Level of Ordinary Skill

60. A person of ordinary skill as of October 14, 1994, would have had 2-3 years of experience or education with computer programming and familiarity with standards that had been established at the time.

61. Such a person may have had general awareness of but little experience with early draft proposals of the HTTP protocol and/or the HTML specification, which were not accepted as standard until after October 14, 1994, and with the NCSA Mosaic browser, of which version 1.0 for Windows was released around December 1993.

62. Such a person would have had rudimentary knowledge of static web pages but no substantial experience with programming dynamic web content.

63. Such a person would not have had any knowledge of HTML 2.0, published as IETF RFC 1866 in November 1995, nor of any other standards or techniques relating to the HTTP protocol or the HTML specification that were not accepted as standard until after October 14, 1994.

64. The authors of the references on which Defendants rely, including Messrs. Berners-Lee, Arnett and Ng, were not persons of ordinary skill, as those individuals were experts with skill much higher than those of ordinary skill.

4.1.5. Conclusions Regarding Obviousness

65. For all of the reasons discussed above, it is my opinion that the prior art cited in Defendants Motion does not render obvious reexamined claim 1 or reexamined claim 9 of the '821 patent to a person of ordinary skill in the art as of October 14, 1994, whether the references cited in the Motion are considered alone or in the combinations described in the Motion.

5. DIRECT INFRINGEMENT

66. I have reviewed Kelora's infringement contentions and have concluded that the exemplary evidence cited therein shows that each Defendant's servers perform each and every element of the methods of the reexamined claims charted in the infringement contentions. With respect to the "displaying" and "revising" steps of reexamined claims 1 and 9, the specification clearly describes these functions being performed with the server. *See, e.g.*, '821 patent, FIG. 24 and 5:1-2, 17:41-18:10, 18:48-63. In the Internet embodiments of the reexamined claims, the specification states that "All of the program files and data files described in the local embodiment reside on the server 125." '821 patent, 18:13-14. A web server displays pages by sending formatted pages with instructions to a web browser, which renders them. Thus, for example, step (c) of reexamined claim 1 and step (c) of reexamined claim 9 of the '821 patent are met when each Defendant's web server sends a page to a web browser, which then renders the page. This is true under both Kelora's and Defendants' proposed constructions of the term "displaying".

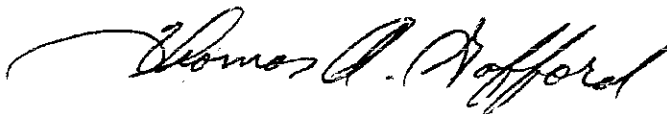
67. Defendants argue in their Motion that the reexamined claims should be construed to require the “displaying” (claims 1-4, 9), “revising” (claims 1-4), and “resubmission” (claims 1-4, 9) elements to be performed by a user's computer. Motion, pp. 45-51. Kelora disputes the Defendants’ constructions and proposes that the claims should be construed to require these functions to be “performed with a server” as specified in the preambles of reexamined claims 1 and 9. *See* Patent L.R. 4-2 Joint Statement. Even if the Court were to adopt the Defendants’ proposed constructions for these claim elements, based on my experience it is my opinion that the Defendants, through their employees and/or agents, must directly perform these claim elements in the course of designing, developing, configuring, deploying, testing, marketing, supporting and maintaining their respective web sites accused of infringement. Direct use of website functionality with a web browser on a client computer in the course of testing is essential, especially before a website or any feature thereof is initially deployed. Such direct uses by the Defendants are not merely incidental, but are fundamental to any initial deployment and ongoing operation of the Defendants’ websites. Without directly using the functionality accused of infringement with a web browser on a client computer during and after design, development and deployment, the Defendants would have no assurance that their websites worked as intended and would not be able to support and maintain them in a commercially viable manner.

68. This is confirmed, for example, by expert testimony and documents produced to date by the Defendants identified in the Motion as the “Endeca Users” (Nebraska Furniture Mart, Cabela’s and Newegg). *See, e.g.,* Larson Depo., 57:7-2 and Depo. Ex. 30, NFM1242-1287 at 1285. With respect to the Endeca Users, it is argued in the Motion that they “do not even provide the core search functionality of the claims” and that, instead, “that functionality is provided by a third party, Endeca.” I have reviewed the Declaration of Ray Larson, an expert proffered in support of the Endeca Users’ divided infringement arguments, as well as the documents cited therein and the transcript of the deposition of Mr. Larson and exhibits thereto. It is my opinion that the evidence provided by the Endeca Users contradicts the Endeca Users’ assertion that they “do not direct or control how Endeca’s software performs the search function.” Motion, p. 51; *see* Larson Decl., ¶¶ 5-16; Larson Depo., 26:10-31:13, 35:9-36:15 and Depo. Exs. 26

1 (NEGG5310-5312) 27 (CAB2045-87) and 28 (CAB108); 38:13-46:22 and Ex. 30 (NFM1242-
2 87). On the contrary, the evidence shows that the Endeca Users direct and/or control how their
3 implementations of the software running on their servers, as well as the data used in search
4 functionality, is designed, developed, built, configured, tested, supported and maintained. Larson
5 Depo., 39:18-76:3, and Ex. 30 (NFM1242-87 at NFM1251-53, NFM1258-60, and NFM 1282-
6 1285. Further, the evidence noted above, as well as the exemplary evidence cited in Kelora's
7 infringement contentions, shows that the Endeca Users' servers perform each and every element
8 of the methods of the reexamined claims charted in Kelora's infringement contentions regarding
9 the Endeca Users.

10 I declare under penalty of perjury that the foregoing is true and correct.

11 Executed this 11th day of October 2011, at Broomfield, Colorado.

12 

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14 By: _____

Thomas A. Gafford

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